

February 20, 2004

CURRICULUM VITAE

Name: Calman Philip Prussin

Citizenship: United States of America

Education and Training:

1975-1980 - B.A. in Chemistry. University of California San Diego, La Jolla, California

1980-1984 - M.D. University of Southern California School of Medicine, Los Angeles

1984-1988 - Internal Medicine Residency, Los Angeles County-University of Southern California Medical Center, Los Angeles, California

1989-1991 - Medical Staff Fellowship, Laboratory of Cellular and Molecular Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

1991-1995 - Allergy and Immunology Clinical Fellowship, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

Board Certification:

Diplomate, American Board of Internal Medicine, 1988

Diplomate, American Board of Allergy and Immunology, 1993

Recertified, 2001

Chronology of Employment:

1990-date - Commissioned Officer, U.S. Public Health Service.
Rank: Commander

1996-date - Head, Clinical Allergy and Immunology Unit, Laboratory of Allergic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health

2000-date - Co-Director, National Institutes of Health Clinical Center Allergy and Immunology Clinical Training Program

Society Memberships:

American Academy of Allergy, Asthma and Immunology
Commissioned Officers Association

Honors & Other Special Scientific Recognition:

Provost's Honor List: 1975, 1976, 1977
President's Undergraduate Fellowship, 1978
Honors in Infectious Diseases Clerkship, 1984
National Institutes of Health Director's Award, 1998
United States Public Health Service Bicentennial Unit Commendation, 1998
United States Public Health Service Commendation Medal, 1999
United States Public Health Service Unit Commendation, 2000

Grant Review Panels:

Chair, Adult AIDS Clinical Trial Group Monokine Research Study Section, 1997
Member, Clinical Sciences Special Emphasis Panel, National Center for Research Resources (Flow Cytometry), 1998
National Academy of Sciences/ U.S.A.I.D Cooperative Development Research Grant Review Committee, 1999
Asthma and Allergy Foundation of America Investigator Award Review Panel, 1999, 2000, 2001, 2002, 2003
Austrian Science Fund (FWF) 2001

Editorial Boards:

Clinical Immunology Newsletter, 1996-1998

Journal Review:

Clinical and Experimental Allergy
Clinical Immunology and Immunopathology
Cytometry
Journal of Allergy and Clinical Immunology
Journal of Clinical Immunology
Journal of Immunological Methods
Journal of Immunology
Journal of Leukocyte Biology
Nature Medicine

Professional Contributions:

National Institutes of Health
Chair , NIAID Institutional Review Board, 1996-1997
Member, NIAID Institutional Review Board, 1995-1997, 2000-date
Member, NIH Human Subjects Research Advisory Committee, 1996-1997
AIDS Clinical Trial Group, Flow Cytometry Committee, 1995-1996
Member, Steering Committee, NIH Cytokine Interest Group, 1996-date
Vice-chair, NIH Cytokine Interest Group, 2003
Chair, Methods in Cytokine Biology Symposium, NIH Cytokine Interest Group, 1996, 1998, 2001, 2003

Attending, Allergy and Immunology Consult Service, 1994-date
Member, Graduate Medical Education Committee, 1999-date
Member, NIAID Clinical Research Standards Implementation Committee, 2000
Member, NIAID Tenure and Promotions Clinical Subcommittee, 2000-date
Member, NIAID Outpatient Working Group, 2003-date

Course lectures taught:

FAES NIH graduate school: Immunology 504, 1997-date; Immunology 517, 1999-date
Coordinator: Allergy and Immunology Fellows' lecture series, 1996-date
NIAID Internal Medicine Residents' lecture series, 1997-date

United States Public Health Service Commissioned Corps:

Awards review panel 2002-date

American Academy of Allergy, Asthma and Immunology:

Fellows in Training Committee, 1995-97
Bronchoalveolar Lavage Committee, 1995-1998
Immunotherapy of Asthma Committee, 1996-date
Training Program Director's Committee, 1999-date
Vice-chair, Cells and Cytokines Committee, 2002-2003
Chair, Cell and Cytokines Committee, 2003-2004
Annual Meeting Abstract Review, 2002-date

Community:

Attending physician, Upper Cardoza asthma outreach clinic, 1999-2002
Graduate student thesis advisor, Georgetown University Department of Pharmacology, 2000-2003
Attending physician, Clara Barton Center for Diabetes Education, August 2003

BIBLIOGRAPHY

Calman Prussin

Original Articles

1. Garst, M. E., V. A. Roberts, and C. Prussin. 1982. Fragmentation of bicyclo[4.4.1]undecan-11-ones. *J Org Chem* 47:3969-3971.
2. Garst, M. E., V. A. Roberts, and C. Prussin. 1983. Steric and electronic effects of 1-substituted dienes in cycloaddition reactions with cycloheptatrienon. *Tetrahedron* 39:581-589.
3. Elson, L. H., T. B. Nutman, D. D. Metcalfe, and C. Prussin. 1995. Flow cytometric analysis for cytokine production identifies T helper 1, T helper 2, and T helper 0 cells within the human CD4+CD27- lymphocyte subpopulation. *J Immunol* 154:4294-4301.
4. Prussin, C., and D. D. Metcalfe. 1995. Detection of intracytoplasmic cytokine using flow cytometry and directly conjugated anti-cytokine antibodies. *J Immunol Methods* 188:117-128.
5. Prussin, C., and B. Foster. 1997. TCR V alpha 24 and V beta 11 coexpression defines a human NK1 T cell analog containing a unique Th0 subpopulation. *J Immunol* 159:5862-5870.
6. Rumsaeng, V., W. W. Cruikshank, B. Foster, C. Prussin, A. S. Kirshenbaum, T. A. Davis, H. Kornfeld, D. M. Center, and D. D. Metcalfe. 1997. Human mast cells produce the CD4+ T lymphocyte chemoattractant factor, IL-16. *J Immunol* 159:2904-2910.
7. Seder, R. A., and C. Prussin. 1997. Are differentiated human T helper cells reversible? *Int Arch Allergy Immunol* 113:163-166.
8. Gurunathan, S., C. Prussin, D. L. Sacks, and R. A. Seder. 1998. Vaccine requirements for sustained cellular immunity to an intracellular parasitic infection. *Nat Med* 4:1409-1415.
9. Gurunathan, S., K. R. Irvine, C. Y. Wu, J. I. Cohen, E. Thomas, C. Prussin, N. P. Restifo, and R. A. Seder. 1998. CD40 ligand/trimer DNA enhances both humoral and cellular immune responses and induces protective immunity to infectious and tumor challenge. *J Immunol* 161:4563-4571.
10. Devouassoux, G., D. D. Metcalfe, and C. Prussin. 1999. Eotaxin potentiates antigen-dependent basophil IL-4 production. *J Immunol* 163:2877-2882.
11. Devouassoux, G., B. Foster, L. M. Scott, D. D. Metcalfe, and C. Prussin. 1999. Frequency and characterization of antigen-specific IL-4- and IL-13- producing

- basophils and T cells in peripheral blood of healthy and asthmatic subjects. *J Allergy Clin Immunol* 104:811-819.
12. Bukreyev, A., S. S. Whitehead, C. Prussin, B. R. Murphy, and P. L. Collins. 2000. Effect of coexpression of interleukin-2 by recombinant respiratory syncytial virus on virus replication, immunogenicity, and production of other cytokines. *J Virol* 74:7151-7157.
 13. Gea-Banacloche, J. C., S. A. Migueles, L. Martino, W. L. Shupert, A. C. McNeil, M. S. Sabbaghian, L. Ehler, C. Prussin, R. Stevens, L. Lambert, J. Altman, C. W. Hallahan, J. C. de Quiros, and M. Connors. 2000. Maintenance of large numbers of virus-specific CD8+ T cells in HIV-infected progressors and long-term nonprogressors. *J Immunol* 165:1082-1092.
 14. Gurunathan, S., L. Stobie, C. Prussin, D. L. Sacks, N. Glaichenhaus, A. Iwasaki, D. J. Fowell, R. M. Locksley, J. T. Chang, C. Y. Wu, and R. A. Seder. 2000. Requirements for the maintenance of Th1 immunity in vivo following DNA vaccination: a potential immunoregulatory role for CD8+ T cells. *J Immunol* 165:915-924.
 15. Stobie, L., S. Gurunathan, C. Prussin, D. L. Sacks, N. Glaichenhaus, C. Y. Wu, and R. A. Seder. 2000. The role of antigen and IL-12 in sustaining Th1 memory cells in vivo: IL-12 is required to maintain memory/effector Th1 cells sufficient to mediate protection to an infectious parasite challenge. *Proc Natl Acad Sci U S A* 97:8427-8432.
 16. Hagaman, D. D., Y. Okayama, C. D'Ambrosio, C. Prussin, A. M. Gilfillan, and D. D. Metcalfe. 2001. Secretion of interleukin-1 receptor antagonist from human mast cells after immunoglobulin E-mediated activation and after segmental antigen challenge. *Am J Respir Cell Mol Biol* 25:685-691.
 17. McInnes, I. B., G. G. Illei, C. L. Danning, C. H. Yarboro, M. Crane, T. Kuroiwa, R. Schlimgen, E. Lee, B. Foster, D. Flemming, C. Prussin, T. A. Fleisher, and D. T. Boumpas. 2001. IL-10 improves skin disease and modulates endothelial activation and leukocyte effector function in patients with psoriatic arthritis. *J Immunol* 167:4075-4082.
 18. Devouassoux, G., A. Saxon, D. D. Metcalfe, C. Prussin, M. G. Colomb, C. Brambilla, and D. Diaz-Sanchez. 2002. Chemical constituents of diesel exhaust particles induce IL-4 production and histamine release by human basophils. *J Allergy Clin Immunol* 109:847-853.
 19. Foster, B., L. B. Schwartz, G. Devouassoux, D. D. Metcalfe, and C. Prussin. 2002. Characterization of mast-cell tryptase-expressing peripheral blood cells as basophils. *J Allergy Clin Immunol* 109:287-293.
 20. Luccioli, S., D. T. Brody, S. Hasan, A. Keane-Myers, C. Prussin, and D. D. Metcalfe. 2002. IgE(+), Kit(-), I-A/I-E(-) myeloid cells are the initial source of IL-

- 4 after antigen challenge in a mouse model of allergic pulmonary inflammation. *J Allergy Clin Immunol* 110:117-124.
21. Foster, B., D. D. Metcalfe, and **C. Prussin**. 2003. Human dendritic cell 1 and dendritic cell 2 subsets express FcepsilonRI: Correlation with serum IgE and allergic asthma. *J Allergy Clin Immunol* 112:1132-1138.
 22. **Prussin, C.**, D. T. Griffith, K. M. Boesel, H. Lin, B. Foster, and T. B. Casale. 2003. Omalizumab treatment downregulates dendritic cell FcepsilonRI expression. *J Allergy Clin Immunol* 112:1147-1154.
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Review Articles

1. Prussin C. 1996. Cytokine flow cytometry: assessing cytokine production at the single cell level. *Clin Immunol News* 16:85-91.
2. Prussin C and M. Kaliner. 1996. Anaphylaxis. *Allergy, Asthma and Immunol* 1: 3-6.
3. Prussin C. 1997. Cytokine flow cytometry: understanding cytokine biology at the single-cell level. *J Clin Immunol* 17:195-204.
4. Prussin C. and D.D. Metcalfe. 2003. IgE, mast cells, basophils and eosinophils. *J Allergy Clin Immunol*, 111, S486-94.

Book Chapters

1. Prussin C. and M.A. Kaliner. 1996. Anaphylaxis. In: Immunobiology; Principles of Medical Biology, E.E. Bittar and N. Bittar, eds. JAI press, Greenwich, CT. 231-238.
2. Prussin C. and P. Openshaw. 1998. Detection of intracellular cytokines by flow cytometry. In: Current Protocols in Immunology, J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober and R. Coico, eds. John Wiley & Sons, New York, NY. 6.24.1-6.24.11.
3. Prussin C. and D. Metcalfe. 2001. Update on the Management of Asthma. In Current Therapy in Internal Medicine, Vol. 46, 31-50. A.S. Fauci, ed. Mosby, Saint Louis , MO..
4. Boumpas DT, Prussin C, Uzel G and JA Mican. 2001. Interleukins and Interferons. In Clinical Immunology Principles and Practice, RR rich, TA

Fleisher, WT Shearer, BL Kotzin, HW Schroeder Jr. eds. Mosby International Ltd, London, UK.

5. Foster B and Prussin C. 2002. Detection of intracellular cytokines by flow cytometry. In: *Current Protocols in Immunology*, J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober and R. Coico, eds. John Wiley & Sons, New York, NY.

Abstracts

1. Nagata, H., R. B. Moss, C. Prussin, P. Burd, J. N. Hausfeld, and M. A. Kaliner. 1993. Expression of messenger-RNA for IL-2 in unprovoked nasal mucosa. *J Allergy Clin Immunol* 91:210.
2. Nagata, H., T. Ikezono, C. Prussin, J. N. Hausfeld, D. D. Metcalfe, and M. A. Kaliner. 1994. IL-4 and IFN-gamma expression in cultured nasal mucosa after anti-IgE activation. *J Allergy Clin Immunol* 93:288.
3. Prussin, C., and M. A. Kaliner. 1994. Single cell assay of gamma-Interferon and interleukin-4 producing CD4 lymphocytes in atopic subjects. *J Allergy Clin Immunol* 93:233.
4. Prussin, C., L. H. Elson, T. B. Nutman, and D. D. Metcalfe. 1995. IFN-gamma and IL-5 are produced by mutually exclusive subsets of human CD4 cells. *J Allergy Clin Immunol* 95:222.
5. Rabin, R. L., I. Fuss, C. Prussin, J. McDyer, O. Garraud, T. B. Nutman, T. A. Fleisher, R. A. Seder, W. Strober, and S. M. Holland. 1996. Characterization of an immunodeficiency manifest by severe viral skin infections, eczema, and asthma. *J Allergy Clin Immunol* 97:861.
6. Prussin, C., B. Foster, and D. D. Metcalfe. 1996. Interleukin-2 is produced by both Th1 and Th2 cells. *J Allergy Clin Immunol* 97:466.
7. Rabin, R. L., I. Fuss, C. Prussin, J. McDyer, O. Garraud, T. B. Nutman, T. A. Fleisher, R. A. Seder, W. Strober, and S. M. Holland. 1996. Characterization of an immunodeficiency manifest by severe viral skin infections, eczema, and asthma. *FASEB J* 10:372.
8. Prussin, C. 1997. Cytokine flow cytometry: understanding cytokine biology at the single-cell level. *J Clin Immunol* 17:195-204.
9. Prussin, C., and B. Foster. 1997. V alpha 24+, V beta 11+ natural T cells are the human analog of murine NK1.1 T cells and demonstrate a predominant Th1 phenotype. *J Allergy Clin Immunol* 99:1049.

10. Prussin, C., B. Foster, L. M. Ludy, and D. D. Metcalfe. 1998. Basophils are the predominant IL-4 producing peripheral blood cells both in vivo and in vitro. *J Allergy Clin Immunol* 101:177.
11. Devouassoux, G., B. Foster, L. M. Scott, D. D. Metcalfe, and C. Prussin. 1999. Frequency and characterization of antigen-specific IL-4 and IL-13 producing basophils and T cells in peripheral blood of normals and asthmatics. *J Allergy Clin Immunol* 103:747.
12. Gurunathan, S., L. Stobie, C. Prussin, C. Y. Wu, N. Glaichenhaus, D. L. Sacks, and R. A. Seder. 1999. Vaccination with lack DNA induces protective immunity through generation of a unique population of CD8+T cells. *FASEB J* 13:A632.
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14. Prussin, C., and B. Foster. 2000. Asthmatic and healthy control subjects demonstrate differential responsiveness to ubiquitous aeroallergens. *J Allergy Clin Immunol* 105:997.
15. Foster, B., L. B. Schwartz, D. D. Metcalfe, and C. Prussin. 2000. Tryptase is expressed by human basophils independent of disease status. *J Allergy Clin Immunol* 105:997.
16. Luccioli, S., D. T. Brody, N. Noben-Trauth, C. Prussin, and D. D. Metcalfe. 2001. Early IL-4 production in a murine model of allergic pulmonary inflammation is IgE-dependent and is mediated by an Fc ϵ R1-bearing non-T, non-B cell. *J Allergy Clin Immunol* 107:1050.
17. Barron, K. S., R. Purcell, S. Emerson, T. J. Kindt, S. T. Shulman, A. H. Rowley, C. Prussin, and M. St Claire. 2001. Kawasaki serum induced allergic response in primates. *Arthritis Rheum* 44:705.
18. Hunter, L. B. C., V. Plainetr, B. Foster, M. M. Huber, C. Prussin, and D. D. Metcalfe. 2002. Direct determination of allergen specific T cell cytokine responses during immunotherapy. *J Allergy Clin Immunol* 109:1091.
19. Luccioli, S., J. P. Justice, H. Isenberg-Feig, C. Prussin, and A. Keane-Myers. 2002. Passive sensitization via IgE leads to immediate AHR and IL-4 production without subsequent Th2-mediated inflammation. *J Allergy Clin Immunol* 109:907.
20. Griffith, D. T., K. M. Boesel, C. Prussin, B. Foster, H. Lin, and T. B. Casale. 2003. Dendritic Cell Fc R1 Expression Is Rapidly Down-Regulated With Omalizumab. *J Allergy Clin Immunol* 111:784.

21. Boesel, K. M., D. T. Griffith, C. Prussin, B. Foster, H. Lin, and T. B. Casale. 2003. Rapid reduction of basophil Fc ϵ R1 expression by omalizumab. *J Allergy Clin Immunol* 111:787.
22. Prussin, C., S. P. James, M. M. Huber, A. D. Klion, and D. D. Metcalfe. 2003. Pilot study of anti-IL-5 in eosinophilic gastroenteritis. *J Allergy Clin Immunol* 111:827.
23. Foster, B., and C. Prussin. 2003. Allergen specific human Th2 cells express a unique chemokine receptor repertoire. *J Allergy Clin Immunol* 111:164.
24. Thai, H. N., B. Foster, and C. Prussin. 2003. Allergen specific Th2 cytokine expression is independent of CD28 costimulation. *J Allergy Clin Immunol* 111:168.